BRUHAT BANGALORE MAHANAGARA PALIKE

RAJARAJESHWARINAGAR ZONE

ELECTRICAL DIVISION

DETAILED ESTIMATE FOR PUBLIC WORKS

Name of the Work:- Replacement of damaged UG cable, panel board, poles and fittings etc, at parks and play grounds comes under Ward no-16,37, 38 and 42 of RR nagara zone

				Est.Cost:-Rs 2,00,000/-			
Sl No	SR ref page	SR ref Item no.	Description of Work	unit	Qty	Rate	Amount
1	5	2.3.2	Wiring for lighting/power circuit using one of FRLS PVC insulated 1100V grade, multistrand copper wire with low conductor resistance single core in open or concealed system of wiring with specified IS-694:confirming to latest amendments. 1.5 sqmm	Mtr.	100	20.50	2050.00
2	7	2.7.1	Wiring for lighting/power circuit using one of PVC insulated 1100V grade, stranded Aluminium wire single core in open or concealed system of wiring.4 sqmm	Mtr.	80	9.00	720.00
3	27	5.17.5	Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF, energy cross-3 with Short circuit breaking capacity of 10K and complete wiring as required confirming to IEC 60898. 40 Amps DP	Each	4	1336.00	5344.00
4	26	5.13.3	Supply and fixing of 4pole power contactor with NO/NC contacts on existing wood/panel board using necessary bolts, nuts, washers and wiring etc., complete with AC-3 Rating and as per IS-13947.60 to 70Amps	Each	4	4200.00	16800.00
5	32	5.47	Supplying and fixing Microprocessor based Electronic timer (without contactor, Din Mounting using necessary bolts, nuts and washers etc.,.) 3-120sec setting.	Each	4	1925.00	7700.00
6	40	6.4.2	Supplying of 1.1 KV LT UG cable XLPE or Heat resistant PVC insulated, PVC extruded Inner sheath armoured UG LT cable as per IS-1554 (Part-1) or IS-7098 Part-1, Armouring strip thickness in average +5% and resistivity 14 Ohms/Kms (Max) as per IS-3975 4 core 10 sqmm	Mtr	100	130.00	13000.00
7	41	6.5.1	Labour charges for laying of 1.1 KV class UG cable in existing trench GI pipe / stoneware pipe / on wall / on pole as required. In existing trench/duct. 6 sqmm to 16 sqmm	Mtr	100	11.88	1188.00
8	41	6.6.1	Digging of trench of 0.6m deep x 0.50 mtr wide refilling the trench to the required ground level and consolidating etc., complete.(As per Civil SR KSRB I-2, P-7) In soil (ordinary)	Mtr	80	76.00	6080.00
9a	43	6.17.5	Supplying tinned copper lugs and crimping and wiring to terminal point for wire of the following sizes. 10 sqmm	Each	20	8.00	160.00
9b	43	6.17.6	16 sqmm	Each	12	12.44	149.28
10	25	5.7.3	Supplying & fixing of Porcelain fuse channel with cut out on existing wooden/panel using necessary nuts, bolts and washers. 63 Amps	Each	2	227.00	454.00
11	31	5.43.1	Supply and Installation / Fixing / Provision of Pole box with HRC Fuse / MCB provision and suitable connector / terminal for 3 Ph / 1 Ph connections with Loop-In & Loop- Out terminals for 10 Sqmm / 25 Sqmm 3.5 C Al/Ar / Cu/ Ar Cable and branch out 2.5 Sqmm 2 core Al/Cu PVC Insulated cable, enclosed in a Thermoplastic, Polystyrene enclosure, which should be shock proof, safe, IP65(Weather Proof), rust proof, dust proof, water proof having Internally Embedded Gasket with provision for cable entry through IP65 Thermoplastic, polyamide glands and/or grommets. 200mmx200mmx98mm	Each	5	1917.00	9585.00

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SR ref			Description of Work	unit	Qty	Rate	Amount
page	Item no.						
12	66	12.7.2	Supply of LED pole mounting type post top lantern with pressure die cast aluminium housing body for optimal thermal dissipation. Lamp compartment comprising of anti glare clear diffuser with Injection moulded polycarbonate/ clear glass material, delivering superior light output.Rated life Burning Hrs 50000 hr @ Lumen Maintenance of 70%, CCT > 5500K, IP 66 optical and electrical compartment & impact resistance of complete luminaire > IK08. Power Factor >0.9 with mains, Surge Protection- Min 5KV along with Over voltage/Overload, short circuit/ miss-wiring protection. Compatible for pole mounting with outer dia of 40mm to 50mm. Universal Voltage driver to operate wide voltage range from 100V to 270V 50/60Hz application. Compliance to IS 10322/IEC 60598, LM 79 & LM 80 Adherence with RoHS. UL approved MCPCB . LED Efficiency>130lm/w, nominal CRI >75. Luminaire manufacturer should have in- house facility accredited by NABL/CPRI & any Government certified agency & Design & Development facility certified by ISO 9001:2008 . Housing with supplier word mark /name shall be Engraved / Embossing on the die cast housing/ Body part. Warranty of 2 Years against any manufacturing defect working under standard electrical conditions as mentioned above should be given by LED manufacturer & Cree/Nichia/ Lumileds/Osram make LED Source. LED Post Top Lantern with 35 watts	No	6	6400.00	38400.00
13	67	12.8.1	Supply of LED Streetlight luminaire with pressure die cast aluminium housing body for optimal thermal dissipation. Lamp compartment comprising of anti glare clear diffuser with Injection moulded polycarbonate material, delivering superior light output. Rated life Burning Hrs 50000 hr @ Lumen Maintenance of 70%, maximum light intensity should be between 60 degrees to 70 degrees. CCT > 5500K, IP 66 optical and electrical compartment & impact resistance of complete luminaire > IK08. Power Factor >0.9 with mains, Surge Protection- Min 5KV along with Over voltage/ Overload, short circuit/ miss-wiring protection. Compatible for pole mouting with outer dia of 40mm to 50mm. Universal Voltage driver to operate wide voltage range from 100V to 270V 50/60Hz application. Compliance to IS 10322/IEC 60598, LM 79 & LM 80 Adherence with RoHS. UL approved MCPCB. Top access street light with single screw to ensure ease of maintenance at the sight site location with minimized minimal tools. LED Light fixture with W System Power consumption. LED Efficiency>130lm/w, nominal CRI >75. Luminaire manufacturer should have in-house facility accredited by NABL/CPRI & any Government certified agency & Design & Development facility certified by ISO 9001:2008 . Housing with supplier word mark /name shall be Engraved / Embossing on the die cast housing/ Body part. Warranty of 2 Years against any manufacturing defect working under standard electrical conditions as mentioned above should be given by LED manufacturer & Cree/Nichia/ Lumileds/Osram make LED Source. LED Streetlight 25watts	No	15	1840.00	27600.00
14	76	13.52.1	Supplying & fixing LED Drivers suitable for 5700K LED fitting Outdoor Fixtures. Operating voltage range from 180V to 265V, 50Hz AC power Supply a) 25W 5700K suitable for outdoor LED fitting.	Each	12	1198.00	14376.00
15	72	13.17.1	Painting of existing street light pole after scrapping the old paint and painted with suitable colour enamel/Silver paint including coping/footing of the pole Upto 5Mtr street light pole.	No	5	550.00	2750.00
16a	30	5.42.2	Fabricating supplying and mounting MS box made out ... SWG suitable for floor / wall mounting, fully weather proof with provision for better heat dissipation, provided with hinged front cover, equipped with tamper proof locking arrangements, with suitable size clamps with necessary cable entry pipe with gland and box should be finished with 7tanks treatment with powder coated paint and finally finished with approved colour etc., complete. 16SWG	sqcm	50000	0.35	17500.00
16b	49	6.39.1	Supplying and fixing angle iron frame work fabricated out of M.S. angle iron.. and M.S. flat ... with bolts, washers etc., and painted with 2 coats of red oxide and then two coats of approved paint -40x40x6mm	mtr	10	255.00	2550.00
17	6	2.3.7	Wiring for lighting/power circuit using one of FRLS PVC insulated 1100V grade, multistrand Copper conductor single core wire in open or concealed system of wiring as per IS-694:1990 & confirming to GTP of GROUP -B. a) 16 Sqmm	mtr	8	188.00	1504.00

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SR ref		Description of Work	unit	Qty	Rate	Amount
Page	Item no.					
40	6.1	Supplying, fixing, wiring, earth electrode for grounding conduits, I.C. cutouts and other equipment's on the meter board using 40mm dia 2.90mm thick GI pipe 2.5 mtr long buried in a pit ... The pit should be filled with equal proportion of salt and charcoal 150mm all-round the pipe to complete depth. The connection from the pipe to the conduit etc., is to be established through GI wire of size as per ISI specification 7.3.3. of IS 732 using 12mm dia bolts, nuts, washers and check nuts etc., the pipe shall have 16 through holes of 12 mm dia	No	1	2999.70	2999.70
		Sub Total				170909.98
		Add GST @ 12%				20509.20
		Add tender Premium @ 5%				8545.50
		Miscellanious and Roundoff	L/S			35.32
		TOTAL				200000.00
		Rupees Two Lakhs only				

Certificate

1) Certified that,the work spot has been inspected by me & prepared the estimate in most economical way of executing the work.

2.) The Provisions made in the estimate are adequate and are necessary.

3.) The Work comes in the BBMP limit and is legitimate charges on the Corporation Funds.

4.) The rates in the Estimate is based on the KPWD (Elect) SR 2019-20

Junior Engineer(Ele)
RR Nagar Zone
BBMP

Assistant Executive Engineer (Ele)
RR Nagar Zone
BBMP

Executive Engineer(Ele)
RR Nagar Zone
BBMP

Administrative Sanctioned for Rs. 200000/-
Rs. Two lakhs only ..... Is accorded
under the head PO298 .....
By EE (Elect) RRN, Page No. 54 & 55
Registered as EE (Elect)RRN/No. 24/21-22 Subject to conditions contained in enclosed memo
No. 24/21-22 Date. 15/11/2021

AE, (Elect) RRN
EE, (Elect) RRN

Technically Sanctioned 2,00000=00
Rs. Two Lakhs Only ..... Is accorded
under the head. PO298 .....
By EE (Elect) RRN, Page No. 40 & 41
Registered as R.R.N. No. 09/21-22 Subject to conditions contained in enclosed memo
No 09/21-22 Date 16/11/2021

AE, (Elect) RRN
EE, (Elect) RRN

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